

### AMENDMENTS TO THE CLAIMS

Please amend the claims as shown below. This listing of claims will replace all prior versions and listings of claims in the application. Deletions of text are indicated with ~~strike through~~ or double bracket [[xxx]]. Added text is shown by underline. Claim status is indicated as **withdrawn, currently amended, original, previously presented or cancelled**. No new matter is introduced by the amendments and no public dedication or prejudice to subsequent renewal is intended by any amendment. Applicants reserve the right to pursue any canceled claim in one or more continuation or divisional application.

#### LISTING OF THE CLAIMS:

**1 (Previously Presented).** A method of generating a plant comprising transformed plant cells, the method comprising:

culturing at least one non-apical meristemic cell to produce at least one shoot;  
culturing at least one leaf base explant or core section explant from the shoot to produce one or more organogenic cells;  
introducing at least one nucleic acid segment into the organogenic cells to produce one or more transformed organogenic cells; and  
generating at least one plant from the transformed organogenic cells without going through a callus intermediate.

**2-4 (Cancelled).**

**5 (Previously Presented).** The method of claim 1, wherein the non-apical meristemic cell comprises a pineapple cell.

**6-9 (Cancelled).**

**10 (Previously Presented).** The method of claim 1,  
wherein the nucleic acid segment comprises at least one sense nucleic acid segment that corresponds to at least a portion of at least one endogenous gene;

wherein the nucleic acid segment comprises at least one sense nucleic acid segment that corresponds to at least a portion of at least one exogenous gene;  
wherein the nucleic acid segment comprises at least one antisense nucleic acid segment that corresponds to at least a portion of at least one endogenous gene;  
wherein the nucleic acid segment encodes at least one polypeptide transcription factor; or,  
wherein the nucleic acid segment encodes at least one promoter and/or at least one enhancer, which nucleic acid segment homologously recombines with at least one promoter and/or at least one enhancer of at least one endogenous gene.

**11-17 (Cancelled).**

**18 (Original).** The method of claim **1**, wherein the nucleic acid segment encodes a polypeptide.

**19-20 (Cancelled).**

**21 (Original).** The method of claim **18**, wherein the polypeptide is heterologous to the organogenic cells.

**22 (Original).** The method of claim **18**, wherein the polypeptide is homologous to at least one endogenous polypeptide of the organogenic cells.

**23 (Previously Presented).** The method of claim **18**, wherein the polypeptide comprises at least one carotenoid biosynthetic polypeptide that is selected from the group consisting of: an isomerase, an isopentenyl diphosphate isomerase, a geranylgeranyl pyrophosphate synthase, a phytoene synthase, a phytoene desaturase, a  $\zeta$ -carotene desaturase, a lycopene  $\beta$ -cyclase, a lycopene  $\epsilon$ -cyclase, a  $\beta$ -carotene hydroxylase, and an  $\epsilon$ -hydroxylase.

**24-54 (Cancelled).**